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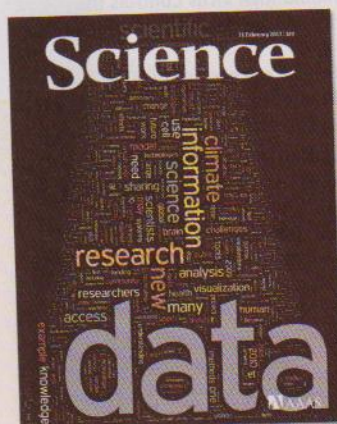
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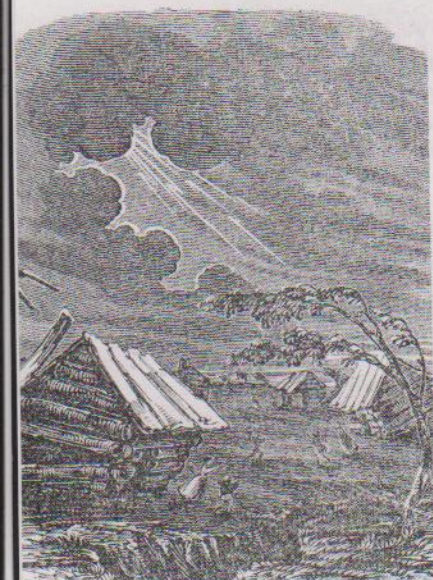
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J. Chamot-Rooke et al.
 Regulated deaggregation allows meningitis-causing bacteria to propagate to new host cells and migrate across epithelia.

SCIENCEONLINE



SCIENCE TALK

Join an online discussion about data use and access and take our reader poll, both part of this week's Dealing with Data special section at www.sciencemag.org/special/data/

SCIENCE EXPRESS

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The World's Technological Capacity to Store, Communicate, and Compute Information

M. Hilbert and P. López

An inventory of the world's technological capacity from 1986 to 2007 reveals the evolution from analog to digital technologies.

10.1126/science.1200970

>> *Dealing with Data* section p. 692; *Science Podcast*

Cortical Constriction During Abcission Involves Helices of ESCRT-III-Dependent Filaments

J. Guizetti et al.

The process by which animal cells are physically separated after cell division is dissected in molecular detail.

10.1126/science.1201847

Different B Cell Populations Mediate Early and Late Memory During an Endogenous Immune Response

K. A. Pape et al.

A cell enrichment technique reveals the dynamics of the endogenous memory B cell response.

10.1126/science.1201730

Tomography of Reaction-Diffusion

Microemulsions Reveals Three-Dimensional Turing Patterns

T. Bánsági Jr. et al.

Tomography reveals three-dimensional Turing patterns created by the Belousov-Zhabotinsky reaction running in a microemulsion.

10.1126/science.1200815

Dynamic Control of Chiral Space in a Catalytic Asymmetric Reaction Using a Molecular Motor

J. Wang and B. L. Feringa

Photoisomerization of a molecular catalyst changes its conformation and switches the chirality of its reaction product.

10.1126/science.1199844

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What Did George Washington Really Look Like? Computer analysis allows researchers to reconstruct pre-photography faces.

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A simple physics experiment highlights the surprising nature of granular materials.

<http://scim.ag/sand-trick>

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The Signal Transduction Knowledge Environment

8 February issue: <http://scim.ag/ss020811>

RESEARCH ARTICLE: The Crystal Structure of a Self-Activating G Protein α Subunit Reveals Its Distinct Mechanism of Signal Initiation

J. C. Jones et al.

The *Arabidopsis* G protein α subunit exhibits properties necessary and sufficient for receptor-independent activation.

PERSPECTIVE: G α_q and Phospholipase C- β —Turn On, Turn Off, and Do It Fast

E. M. Ross

A crystal structure illuminates reciprocal regulation between a G protein and its effector.

PERSPECTIVE: How Cells Use Pseudopods for Persistent Movement and Navigation

P. J. M. Van Haastert

A model of pseudopod formation, splitting, and persistence describe how cells migrate.

GLOSSARY

Find out what MAX, FRK, and TIMP mean in the world of cell signaling.

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9 February issue: <http://scim.ag/stm020911>

COMMENTARY: Power to the People—Participant Ownership of Clinical Trial Data

S. F. Terry and P. F. Terry

The time has come to crowd-source data for diagnostic and therapeutics development.

COMMENTARY: Electronic Consent Channels—Preserving Patient Privacy Without Handcuffing Researchers

R. H. Shelton

Policy-makers, researchers, and information technology leaders can help transform how we protect and use patient data.

>> *Dealing with Data* section p. 692 and www.sciencemag.org/special/data/

RESEARCH ARTICLE: Photodynamic Ablation of Lymphatic Vessels and Intralymphatic Cancer Cells Prevents Metastasis

T. Tammela et al.

Photodynamic therapy suppresses metastasis by eradicating both the in-transit tumor cells and their conduit to distant tissues.

RESEARCH ARTICLE: 5-Lipoxygenase Metabolite 4-HDHA Is a Mediator of the Antiangiogenic Effect of ω -3 Polyunsaturated Fatty Acids

P. Sapieha et al.

In mice, certain fatty acids in the diet are converted to a metabolite that blocks destructive vessel growth similar to diabetic retinopathy.

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More Than Words: Biomedical Ontologies Provide New Scientific Opportunities

C. Wald

Biomedical ontology is growing as an informatics specialty, and ontologies are proving to be powerful software and data-mining tools.

Surfing the Tsunami

E. Pain

Scientists in many disciplines need informatics and computational skills to exploit the increasingly vast quantities of available data.

Sharing Data in Biomedical and Clinical Research

K. Travis

It's not always clear how or where to share raw data, particularly when it includes patient information. >> *Dealing with Data* section p. 692 and www.sciencemag.org/special/data/

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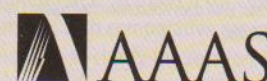
<http://scim.ag/genome10>

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